

January 6, 2003

RE: Bremen Castings, Inc 099-16245-00001  
TO: Interested Parties / Applicant  
  
FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

*(over)*

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
Administrator, Christine Todd Whitman  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNTVPMOD.wpd 8/21/02

January 6, 2003

Mr. Kyle Morton  
Bremen Castings Inc.  
P. O. Box 129  
Bremen, Indiana 46506

Re: 099-16245-00001  
Second Significant Permit Modification to  
Part 70 permit No.: T 099-6206-00001

Dear Mr. Morton:

Bremen Castings Inc. was issued Part 70 operating permit T 099-6206-00001 on January 21, 1999 for the operation of a gray and ductile iron castings manufacturing. A letter requesting changes to this permit was received on June 17, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The permit modification consists of:

1. Changing Section A to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1.
2. A new condition was added as condition D.1.1. Conditions following the new D.1.1 were renumbered to account for this addition. Also, the table of content was changed to show this addition and renumbering of conditions.
3. Changing the Facility Description to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1.
4. Changing Condition D.1.1 to reflect changes made to rule 326 IAC 6-3 on June 2002. The condition was also changed as follows to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1 with the new allowable PM emissions and process weight of the new line.
5. Changing condition D.1.3 to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1 with a new PM and PM10 testing requirement for the new line.
6. Adding a new reporting requirement to the permit.
7. Adding a new quarterly report of the amount of iron poured at the new mold line to the permit.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Ghassan Shalabi, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Ghassan Shalabi or extension (3-0431), or dial (317) 233-0431.

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

GAS

cc: File - Marshall County  
U.S. EPA, Region V  
Marshall County Health Department  
Northern Regional Office  
Air Compliance Section Inspector - Dick Sekula  
Compliance Data Section - Karen Nowak  
Administrative and Development - Lisa Lawrence  
Technical Support and Modeling - Michele Boner

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**Bremen Casting, Inc.  
500 North Baltimore Street  
Bremen, Indiana 46506**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T099-6206-00001	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: January 21, 1999  Expiration Date: January 21, 2004
First Administrative Amendment No.: 099-10532-00001, issued April 9, 1999 Second Administrative Amendment No.: 099-11720-00001, issued March 8, 2000 Third Administrative Amendment No.: 099-11952-00001, issued April 12, 2000 Fourth Administrative Amendment No.: 099-12984-00001, issued January 8, 2001 Fifth Administrative Amendment No.: 099-13779-00001, issued February 28, 2001 First Reopening No.: 099-13408-00001, issued November 8, 2001 First Significant Permit Modification No.: 099-15684-00001, issued August 12, 2002	
Second Significant Permit Modification No.: 099-16245-00001	Pages Affected: 5, 28, 29, 31, and 41
Original signed by Paul Dubenetzky  Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 6, 2003

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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The Permittee owns and operates a stationary gray and ductile iron castings manufacturer.

Responsible Official: James E. Brown, President/CEO  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
SIC Code: 3321  
County Location: Marshall  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Major Source, under PSD Rules;  
Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) Handling of charge materials for melting furnaces;
- (b) A cupola melting operation consisting of one (1) 14 tons per hour cupola furnace, identified as CUPOLA, one (1) 40 ton electric induction holding furnace for holding molten metal from the cupola furnace, and ladles for pouring molten metal into the molds from one of the six (6) mold making machines, identified as Hunter #1, Hunter #3 - Hunter #6 and Sinto #1. CUPOLA is equipped with a wet scrubber, identified as WS#1, for particulate matter control, and exhausting through one (1) stack, identified as DS-9;
- (c) An electric induction furnace (EIF) melting operation consisting of two (2) 1.75 tons per hour electric induction furnaces, identified as #1 and #2, and ladles for pouring molten metal into the molds from one of the seven (7) mold making machines, identified as Hunter #1 - Hunter #6 and Sinto #1, with particulate matter emissions controlled by a baghouse, identified as DC-2;
- (d) A shell core making process consisting of seven (7) natural gas fired shell core machines with a maximum capacity of 0.70 tons of cores per hour in total, exhausting through two stacks identified as RE-19 and RE-20;
- (e) An isocure core making process consisting of one (1) sand mixer and three (3) isocure core machines, identified as Isocure #1, Isocure #2 and Isocure #3, each with a maximum capacity of 1.0 ton of cores per hour, exhausting through one (1) stack, identified as DS-12;
- (f) A sand handling system consisting of:
  - (1) one (1) shakeout system including one (1) shaker pan and one (1) rotary shakeout, with particulate matter emissions controlled by a baghouse, identified as DC-2,

- (2) one (1) sand muller, two (2) silos, two (2) sand storage tanks, two (2) elevators, conveyors, one (1) magnetic separator, one (1) sand cooler, one (1) sand screen, and one (1) recycle sand hopper, with particulate matter emissions controlled by a baghouse, identified as DC-2; and
- (g) A grinding/cleaning operation including three (3) shot blast machines, identified as Shot #1 - #3, and grinding/finishing, controlled by a baghouse (DC-1), and exhausting through one (1) stack (DC-1).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1 (21):

- (a) Two (2) grinding units with PM emissions controlled by baghouse DC-1 and exhausting through stack DC-1.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B

## GENERAL CONDITIONS

### B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

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- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

### B.2 Definitions [326 IAC 2-7-1]

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

### B.3 Permit Term [326 IAC 2-7-5(2)]

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This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

### B.4 Enforceability [326 IAC 2-7-7(a)]

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- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

### B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.6 Severability [326 IAC 2-7-5(5)]

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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This permit does not convey any property rights of any sort, or any exclusive privilege.

### B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

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- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

**B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]**

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- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- 
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
    - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ.

**B.13 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,  
Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

**B.14 Permit Shield [326 IAC 2-7-15]**

- 
- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ has issued the modification. [326 IAC 2-7-12(b)(8)]

**B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]**

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.



**B.16** Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17** Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.18 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

**B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

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- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]**

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The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

**B.22 Operational Flexibility [326 IAC 2-7-20]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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**B.23 Construction Permit Requirement [326 IAC 2]**

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

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**B.24 Inspection and Entry [326 IAC 2-7-6(2)]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.  
[326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ nor an authorized representative, may disclose the information unless and until IDEM, OAQ makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAQ acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

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**B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]**

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ shall reserve the right to issue a new permit.

**B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

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- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

#### C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.8 Stack Height [326 IAC 1-7]

- (a) The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

**C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**

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- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.



### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.10 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

#### **C.11 Compliance Schedule [326 IAC 2-7-6(3)]**

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The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

#### **C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.14 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**C.15 Pressure Gauge Specifications**

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Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]**

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If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAQ that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]**

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

**C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]**

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

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- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Stratospheric Ozone Protection**

**C.24 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Handling of charge materials for melting furnaces;
- (b) A cupola melting operation consisting of one (1) 14 tons per hour cupola furnace, identified as CUPOLA, one (1) 40 ton electric induction holding furnace for holding molten metal from the cupola furnace, and ladles for pouring molten metal into the molds from one of the six (6) mold making machines, identified as Hunter #1, Hunter 3 - Hunter #6 and Sinto #1. CUPOLA is equipped with a wet scrubber, identified as WS#1, for particulate matter control, and exhausting through one (1) stack, identified as DS-9; and
- (c) An electric induction furnace (EIF) melting operation consisting of two (2) 1.75 tons per hour electric induction furnaces, identified as #1 and #2 and ladles for pouring molten metal into the molds from one of the six (6) mold making machines, identified as Hunter #1, Hunter #3 - Hunter #6 and Sinto #1, with particulate matter emissions controlled by a baghouse, identified as DC-2. (DC-2 is also used to control PM emissions for the sand handling system in Section D.3. Compliance monitoring requirements for DC-2 are detailed in Section D.3)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This modification to a PSD major source is not subject to this rule. This rule applies to modifications with the potential to emit (PTE) greater than or equal to the PSD Significant levels.

This source is accepting limits such that this modification has a limited PTE of less than PSD Significant levels as follows:

- (a) The amount of iron poured on the new mold line Hunter #1 shall be limited to 14,994 tons per year.
- (b) Emissions from the new mold line Hunter #1 shall be limited to 3.10 pounds of PM per ton of iron poured, 2.00 pounds of PM10 per ton of iron poured, 0.02 pounds of SO2 per ton of iron poured, 0.14 pounds of VOC per ton of iron poured, 0.01 pounds of NOx per ton of iron poured, 0.02 pounds of Lead per ton of iron poured and 0.42 pounds of HAPs per ton of iron poured.

Therefore, pursuant to 326 IAC 2-2 the PSD requirements do not apply.

#### D.1.2 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Process), the allowable Particulate emissions from charge handling shall not exceed 21.67 pounds per hour, when operating at a total process weight rate of 12 tons per hour.
- (b) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Process), the allowable Particulate emissions from the cupola shall not exceed 21.67 pounds per hour, when each is operating at a total process weight rate of 12 tons per hour.

Any change or modification for the cupola that would lead to increase in process weight rate of greater than 12 tons per hour must be approved by the OAQ before such change can occur.

- (c) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Process), the allowable Particulate emissions from each electric induction furnace shall not



exceed 5.96 pounds per hour, when each is operating at a total process weight rate of 1.75 tons per hour.

- (d) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Process), the allowable Particulate emissions from pouring/cooling processed in the Hunter #1, Hunter # 3 - # 6 and Sinto #1 Lines shall not exceed 46.64, 32.5, 43.6, 32.5, 32.5 and 45.3 pounds per hour, respectively, when operating at total process weight rates of 62.28, 21.9, 45.2, 21.9, 21.9 and 54.0 tons per hour, respectively.

The above pounds per hour limitations were calculated with the following equation:

For  $P < 30$  tons/hr

$$E = 4.10 P^{0.67}$$

where  $E$  = rate of emission in pounds per hour; and  
 $P$  = process weight rate in tons per hour

For  $P > 30$  tons/hr

$$E = 55.0 P^{0.11} - 40$$

where  $E$  = rate of emission in pounds per hour and  
 $P$  = process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

### Compliance Determination Requirements

#### D.1.4 Testing Requirements [326 IAC 2-7-6(1), (6)]

- (a) During the period between 24 and 30 months after issuance of this permit, the Permittee shall perform PM testing for the metal pouring/cooling operation for one (1) of the Hunter #3 - #6 lines plus testing for the Sinto #1 line utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) Within sixty (60) days after achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial start-up of the new mold line Hunter #1, the Permittee shall perform PM (filterable) and  $PM_{10}$  (filterable and condensable) stack tests utilizing methods approved by the Commissioner. These test shall be performed in accordance with Section C – Performance Testing, in order to determine compliance with the corresponding limits specified in condition D.1.1(b).

#### D.1.5 Particulate Matter (PM)

The wet scrubber for controlling cupola PM emissions shall be in operation at all times when the cupola is in operation and exhausting to the outside atmosphere.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.6 Visible Emissions Notations

- (a) Daily visible emission notations of the cupola, metal pouring/cooling operation and the electric induction furnace stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not

counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.1.7 Parametric Monitoring**

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The Permittee shall record the scrubbing water flow rate and total static pressure drop across the wet scrubber used in conjunction with the cupola, at least once daily when the cupola is in operation when venting to the outside atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the scrubbing water flow rate shall be maintained at no less than 70 gallons per minute and the pressure drop across the wet scrubber shall be maintained at a minimum of 23 inches of water or water flow rate and pressure drop ranges established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the water flow rate and pressure reading are less than the above mentioned values for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### **D.1.8 Scrubber Failure Detection**

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In the event that scrubber failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced.
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### **D.1.9 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the cupola, the metal pouring/cooling operation and the electric induction furnace stack exhausts.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Scrubbing water flow rate.

- (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.10 Reporting Requirements

A quarterly summary of the amount of iron poured at the new Hunter #1 specified in condition D.1.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (d) A shell core making process consisting of seven (7) natural gas fired shell core machines with a maximum capacity of 0.70 tons of cores per hour in total, exhausting through two stacks, identified as RE-19 and RE-20; and
  - (e) An isocure core making process consisting of one (1) sand mixer and three (3) isocure core machines, identified as Isocure #1, Isocure #2 and Isocure #3, each with a maximum capacity of 1.0 ton of cores per hour, exhausting through one (1) stack, identified as DS-12; (Isocure #3 will minimize buying cores from outside vendors and will minimize hours of operation to the other isocures, therefore, there is no increase in utilization.)
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from shell core making process shall not exceed 3.23 pounds per hour, when operating at a total process weight rate of 0.7 tons per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from isocure core making shall not exceed 6.52 pounds per hour, when operating at a total process weight rate of 2 ton per hour.

The above pounds per hour limitations were calculated with the following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]

The core making machine, identified as Isocure #3 shall limit sand usage to less than 8,696 tons per 12 consecutive month period, which is equivalent to single HAP (Amine Gas) emissions of less than 10 tons per 12 consecutive month period (based on the emission factor of 2.30 lb of single HAP/ton sand used). This sand usage limit shall render the requirements of 326 IAC 2-4.1-1 not applicable.

### Compliance Determination Requirements

#### D.2.3 Testing Requirements [326 IAC 2-7-6(1), (6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the core making operation stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### **D.2.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records of the sand usage limits for the new core making machine (Isocure #3).
- (b) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the core making stack exhausts.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.2.6 Reporting Requirements**

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A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (f) A sand handling system consisting of:
- (1) one (1) shakeout system including one (1) shaker pan and one (1) rotary shakeout, with particulate matter emissions controlled by a baghouse, identified as DC-2,
  - (2) one (1) sand muller, two (2) silos, two (2) sand storage tanks, two (2) elevators, conveyors, one (1) magnetic separator, one (1) sand cooler, one (1) sand screen, and one (1) recycle sand hopper, with particulate matter emissions controlled by a baghouse, identified as DC-2; and
- (g) A grinding/cleaning operation including three (3) shot blast machines, identified as Shot #1 - #3, and grinding/finishing, controlled by a baghouse (DC-1), and each exhausting through one (1) stack (DC-1).

Insignificant activities, as defined in 326 IAC 2-7-1 (21):

- (a) Two (2) grinding units with PM emissions controlled by baghouse DC-1 and exhausting through stack DC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from sand handling shall not exceed 51.28 pounds per hour, when operating at a total process weight rate of 100 tons per hour.

The above pounds per hour limitations were calculated with the following equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from casting shakeout shall not exceed 21.67 pounds per hour, when operating at a total process weight rate of 12 tons per hour.

The above pounds per hour limitations were calculated with the following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from the grinding/cleaning operation shall not exceed 17.06 pounds per hour, when each is operating at a maximum process weight rate of 8.4 tons per hour.

The above pounds per hour limitations were calculated with the following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (d) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emissions from the two (2) grinding units which have a maximum process weight rate of less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

#### D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

## **Compliance Determination Requirements**

### **D.3.3 Testing Requirements [326 IAC 2-7-6(1), (6)]**

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.3.4 Particulate Matter (PM)**

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The baghouses (DC-1 and DC-2) for PM control, shall be in operation at all times when the sand handling operation, casting shakeout, shot blasters and grinding/finishing operation are in operation and exhausting to the outside atmosphere.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.3.5 Visible Emissions Notations**

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- (a) Daily visible emission notations of the baghouse stack exhausts (DC-1 and DC-2) shall be performed during normal daylight operations when exhausting when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

### **D.3.6 Parametric Monitoring**

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The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the sand handling operation, casting shakeout, and grinding/cleaning operation, at least once daily when the sand handling operation, casting shakeout, and grinding/cleaning operation are in operation when venting to the outside atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each of the Baghouses DC-1 and DC-2 shall be maintained within the range of 3.0 to 9.0 inches of water, or ranges established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

#### D.3.7 Baghouse Inspections

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An inspection shall be performed each calendar quarter of all bags controlling sand handling operation, casting shakeout, and grinding/cleaning operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.3.8 Broken or Failure Bag Detection

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In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### D.3.9 Record Keeping Requirements

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- (a) To document compliance with Condition D.3.5, the Permittee shall maintain records of daily visible emission notations of the sand handling operation, casting shakeout, shot blasters and grinding/finishing operation stack exhausts.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Cleaning cycle: frequency and differential pressure.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures.
  - (5) Operator standard operating procedures (SOP).
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
  - (8) Documentation of the dates vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
  
PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Bremen Casting, Inc.  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
Part 70 Permit No.: T099-6206-00001

**This certification shall be included when submitting monitoring, testing reports/results  
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
P.O. Box 6015  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Bremen Casting, Inc.  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
Part 70 Permit No.: T099-6206-00001

**This form consists of 2 pages**

**Page 1 of 2**

Check either No. 1 or No.2	
9 1.	This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2.	This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Bremen Casting, Inc.  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
Part 70 Permit No.: T099-6206-00001  
Facility: Isocure #3  
Parameter: Single HAP (Amine Gas)  
Limit: use less than 8,696 tons of sand per 12 consecutive month period, which is equivalent to single HAP (Amine Gas) emissions of less than 10 tons per 12 consecutive month period (based on the emission factor of 2.30 lb of single HAP/ton sand used).

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	Single HAP Emission This Month	Single HAP Emission Previous 11 Months	Single HAP Emission 12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Bremen Casting, Inc.  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
Part 70 Permit No.: T099-6206-00001  
Facility: Mold line Hunter #1  
Parameter: Iron poured on Hunter #1  
Limit: 14,994 tons per twelve (12) consecutive month period rolled on a monthly basis

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: Bremen Casting, Inc.  
Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
Part 70 Permit No.: T099-6206-00001

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

**9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD**

**9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

<b>Compliance Monitoring Requirement</b> (eg. Permit Condition D.1.3)	<b>Number of Deviations</b>	<b>Date of each Deviations</b>

Form Completed By: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification.

#### Source Background and Description

Source Name:	Bremen Castings, Inc.
Source Location:	500 North Baltimore St., Bremen, IN
County:	Marshall
SIC Code:	3321
Operation Permit No.:	T 099-6206-00001
Operation Permit Issuance Date:	01/21/1999
Significant Source Modification No.:	099-15758-00001
Significant Permit Modification No.:	099-16245-00001
Permit Reviewer:	Ghassan Shalabi

On November 1, 2002, the Office of Air Quality (OAQ) had a notice published in the Plymouth Pilot News, Plymouth, Indiana, stating that Bremen Castings, Inc. had applied for a Significant Source Modification and a Significant Permit Modification to a Part 70 source for replacing two of the existing molding lines designated as Hunter #1 and Hunter #2 with one new molding line identified as Hunter #1 with a maximum capacity of 240 molds per hour and 9.0 tons of gray or ductile iron castings per hour. Finally, the noticed informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Written comments were received from Bremen Castings, Inc., on November 26, 2002. These comments and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with strikethrough and that added is shown in bold) are as follows:

#### Comment 1:

##### Section D.1.2 (d)

5.87 and 1.71 should be removed and replaced with 46.64 and 62.28, respectively. Should read "Particulate emissions from pouring/cooling processed in Hunter #1, Hunter #3 - #6 and Sinto #1 Lines shall not exceed **46.64**, 32.5, 43.6, 32.5, 32.5 and 45.3 pounds per hour, respectively, when operating at total process weight rates of **62.28**, 21.9, 45.2, 21.9, 21.9 and 54.0 tons per hour, respectively."

THE PROCESS WEIGHT FOR HMC 2024 #1 IS:

HMC 2024 #1 = 18,000 lbs. of iron per hour

$(16\text{in})(20\text{in})(24\text{in})(100 \frac{\text{lb}}{\text{ft}^3})/1728 \text{ in}^3 = 444 \text{ lbs./mold}$

$444 \text{ lbs./mold} \times 240 \text{ molds/hr} = 106,560 \text{ lbs. per hour of sand.}$

Total process weight = **124,560 lbs./hr (62.28 Tons/hr)**

Allowable Emissions should be:

$E = 55(62.28)^{0.11} - 40$

E = 46.64 lbs./hr

**Response 1:**

As a clarification, HMC 2024 #1 referred to by the Bremen Castings, Inc. is the model number for the new molding line identified as Hunter #1.

Condition D.1.2 is corrected as follow:

D.1.2 Particulate [326 IAC 6-3-2]

- (d) Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Process), the allowable Particulate emissions from pouring/cooling processed in the Hunter #1, Hunter # 3 - # 6 and Sinto #1 Lines shall not exceed ~~5.87~~ **46.64**, 32.5, 43.6, 32.5, 32.5 and 45.3 pounds per hour, respectively, when operating at total process weight rates of ~~1.74~~ **62.28**, 21.9, 45.2, 21.9, 21.9 and 54.0 tons per hour, respectively.

**Comment 2:**

Section D.1.4(b)

We object to the testing of condensable PM10! There is no analytical method to specifically test for condensable particulate matter less than 10 microns. Method 202 is the method of choice for condensable particulate matter, but is inappropriate for PM10 as it cannot differentiate between particle size. It can also measure condensable VOC's. If condensable VOC's are measured as part of method 202, it can then provides inaccurate results for the amount of PM10 emitted.

We request that the condensable PM10 testing requirement be removed at this time due to the inaccuracy of the testing method.

**Response 2:**

Testing for PM10 (Condensable) emissions is very important because the PM10 (where PM10 includes both filterable and condensable components) emissions from the new mold line are limited to bellow 15 tons per year in order to render the requirement of 326 IAC 2-2 (PSD) not applicable. State and federal regulations define PM10 as both filterable and condensable PM10. The limitation for avoiding PSD applicability applies to combined filterable and condensable PM10 emissions. Therefore, to avoid any future compliance issues and enforcement actions, it is pertinent that the Permittee tests both filterable and condensable PM10 to show compliance with the applicable limitation.

IDEM is aware of the source's concerns and is currently discussing these issues with USEPA. The source is advised to communicate with the Compliance Data Section at IDEM, OAQ during the submission of the performance testing protocol to discuss the best method to be used to satisfy the PM10 testing requirement.

No change made to the testing requirement in response to this comment.



## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification.**

#### **Source Background and Description**

Source Name:	Bremen Castings, Inc.
Source Location:	500 North Baltimore St., Bremen, IN
County:	Marshall
SIC Code:	3321
Operation Permit No.:	T 099-6206-00001
Operation Permit Issuance Date:	01/21/1999
Significant Source Modification No.:	099-15758-00001
Significant Permit Modification No.:	099-16245-00001
Permit Reviewer:	Ghassan Shalabi

The Office of Air Quality (OAQ) has reviewed a modification application from Bremen Castings, Inc. relating to:

Replacing two of the existing molding lines designated as Hunter #1 and Hunter #2 with one new molding line identified as Hunter #1 with a maximum capacity of 240 molds per hour and 9.0 tons of gray or ductile iron castings per hour and exhausting to stack DS-18, DS-19, and DS-20.

#### **Special Issue - Increased Utilization of Existing Processes**

Bremen Castings has removed two old technology, completely manual, mold lines and associated pouring lines. Bremen Castings is proposing to install a new mold line and associated pouring line with a capacity of 9 tons iron/hr.

The construction and operation of the new mold line is not for fulfilling any new contracts, nor for supplying larger existing markets. The purpose for the addition of the new mold line is to provide Bremen Castings with new molding technology to reduce the cost of producing current castings by reducing the manpower requirement from 9 to 4 workers and by utilizing molding techniques not presently used. Bremen Castings currently has 3 different flask sizes; 14x19, 20x24 and 20x26. The new Hunter will be capable of running both the 14x19 and the 20x24 patterns without tooling changes and with minor tooling changes will be capable of running the 20x26 flask size which gives Bremen more flexibility to meet the needs of their customers. The business plan regarding this project and the estimated savings from the project were provided to IDEM by Bremen Castings in a confidential document. Therefore, IDEM has determined that the construction and operation of the new mold line would not result in an increased utilization of the other existing foundry processes, including melting, pouring, cooling, shakeout, sand handling, and finishing.

#### **History**

On June 17, 2002, Bremen Castings, Inc. submitted an application to the OAQ requesting the replacement of two of the existing molding line designated as Hunter #1 and Hunter #2 with one new molding line identified as Hunter #1. Bremen Castings, Inc. was issued a Part 70 permit on January 21, 1999.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
DS-18	Hunter #1	36	3.33	35,000	120
DS-19	Hunter #1	36	2.5	14,000	120
DS-20	Hunter #1	36	2.5	14,000	120

### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and the Part 70 Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 17, 2002. Additional information was received on September 17, 2002.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (2 pages).

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	122.2
PM-10	78.84
SO <sub>2</sub>	0.79
VOC	5.52
CO	0.00
NO <sub>x</sub>	0.39

  

HAP's	Potential To Emit (tons/year)
Manganese	1.65
Other	0.85

TOTAL	2.50
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### Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (f)(4). The potential to emit is greater than or equal to twenty-five (25) tons per year for PM and PM-10.

The Significant Source Modification will be incorporated into the Part 70 permit through a Significant Permit Modification because a new reporting condition is required to be added to the existing title V permit to limit the amount of iron poured on the new line.

### County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marshall County has been classified as attainment or unclassifiable for PM10, SO2, NO2, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
This type of operation is one of the 28 listed source categories under 326 IAC 2-2; therefore, the fugitive emissions are counted toward determination of PSD applicability.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 100
PM-10	less than 100
SO <sub>2</sub>	less than 100
VOC	less than 100
CO	greater than 250
NOx	less than 100

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon the Annual Air Emission Inventory and Emission Statement Facility Report for the year 2000 located on the OAQ web page under Date Source for Marshall County at <http://www.IN.gov/idem/air/data>.

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	Lead	HAPs
The limited potential to emit for new molding line	23.24	14.99	0.15	1.05	0.00	0.07	0.12	3.12
PSD Significant levels	25	15	40	40	100	40	0.6	

The limited emission is achieved by limiting the iron poured on the new mold line to 14,994 tons per year.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. The source has accepted limits on the amount of PM, PM10, VOC, SO<sub>2</sub>, CO, Lead emitted in order to render PSD not applicable. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply. For detailed calculations, please refer to Appendix A.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This modification to a PSD major source is not subject to this rule. This rule applies to modifications with the potential to emit (PTE) greater than or equal to the PSD Significant levels.

This source is accepting limits such that this modification has a limited PTE of less than PSD Significant levels as follows:

1. The amount of iron poured on the new mold line Hunter #1 shall be limited to 14,994 tons per year.
2. Emissions from the new mold line Hunter #1 shall be limited to 3.10 pounds of PM per ton of iron poured, 2.00 pounds of PM10 per ton of iron poured, 0.02 pounds of SO<sub>2</sub> per ton of iron poured, 0.14 pounds of VOC per ton of iron poured, 0.00 pounds of CO per

ton of iron poured, 0.01 pounds of NOx per ton of iron poured, 0.02 pounds of Lead per ton of iron poured and 0.42 pounds of HAPs per ton of iron poured.

Therefore, pursuant to 326 IAC 2-2 the PSD requirements do not apply.

**326 IAC 2-4.1-1 (HAPs Major Sources: New Source Toxics Control)**

This proposed project is potentially subject to the New Source Toxics Control rule which requires a constructed or reconstructed major source of HAPs to control emissions consistent with MACT. Because there is no established NESHAP for grey iron foundries, this source would be required to make the MACT determination on a case-by-case basis. The requirements of this rule are consistent with the final federal rule implementing Section 112(g)(2)(B) of the Clean Air Act.

In order to render the requirements of 326 IAC 2-4.1-1 not applicable to this modification, the HAPs emissions from the new mold line have been limited to a combined total of 3.12 tons per year. This is less than 10 tons per year for any single HAP and less than 25 tons per year for any combination of HAPs. Therefore, this limit is also sufficient to render the requirements of 326 IAC 2-4.1-1 (HAPs Major Sources: New Source Toxics Control) not applicable to the new mold line.

**326 IAC 8-1-6 (BACT)**

The new mold line is not subject to this rule. This rule applies to facilities constructed after January 1, 1980 which have the potential to emit 25 tons per year or more of VOC. The new mold line has the potential to emit limited to 1.05 tons of VOC per year, therefore, this rule does not apply.

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Process)**

The particulate emissions from Hunter #1 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where} \quad E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Bremen Castings does not use a control devices at the new mold line Hunter #1 to achieve compliance with emission limitations or standards. Therefore , 40 CFR Part 64 (Compliance Assurance Monitoring) does not apply.

### Changes to the Part 70 Permit

1. Section A was changed to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Handling of charge materials for melting furnaces;
  - (b) A cupola melting operation consisting of one (1) 14 tons per hour cupola furnace, identified as CUPOLA, one (1) 40 ton electric induction holding furnace for holding molten metal from the cupola furnace, and ladles for pouring molten metal into the molds from one of the ~~seven (7)~~ **six (6)** mold making machines, identified as Hunter #1, **Hunter #3** - Hunter #6 and Sinto #1. CUPOLA is equipped with a wet scrubber, identified as WS#1, for particulate matter control, and exhausting through one (1) stack, identified as DS-9;
2. Section D.1 was changed as follows:

- (A) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.1.1. Conditions following the new D.1.1 were renumbered to account for this addition. Also, the table of content was changed to show this addition and renumbering of conditions.

#### **D.1.1 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

**This modification to a PSD major source is not subject to this rule. This rule applies to modifications with the potential to emit (PTE) greater than or equal to the PSD Significant levels.**

**This source is accepting limits such that this modification has a limited PTE of less than PSD Significant levels as follows:**

- (a) **The amount of iron poured on the new mold line Hunter #1 shall be limited to 14,994 tons per year.**
- (b) **Emissions from the new mold line Hunter #1 shall be limited to 3.10 pounds of PM per ton of iron poured, 2.00 pounds of PM10 per ton of iron poured, 0.02 pounds of SO2 per ton of iron poured, 0.14 pounds of VOC per ton of iron poured, 0.01 pounds of NOx per ton of iron poured, 0.02 pounds of Lead per ton of iron poured and 0.42 pounds of HAPs per ton of iron poured.**

**Therefore, pursuant to 326 IAC 2-2 the PSD requirements do not apply.**

- (B) The Facility Description was changed to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1:

Facility Description [326 IAC 2-7-5(15)]

- (a) Handling of charge materials for melting furnaces;

- (b) A cupola melting operation consisting of one (1) 14 tons per hour cupola furnace, identified as CUPOLA, one (1) 40 ton electric induction holding furnace for holding molten metal from the cupola furnace, and ladles for pouring molten metal into the molds from one of the ~~seven (7)~~ **six (6)** mold making machines, identified as Hunter #1, **Hunter #3** - Hunter #6 and Sinto #1. CUPOLA is equipped with a wet scrubber, identified as WS#1, for particulate matter control, and exhausting through one (1) stack, identified as DS-9; and
  - (c) An electric induction furnace (EIF) melting operation consisting of two (2) 1.75 tons per hour electric induction furnaces, identified as #1 and #2 and ladles for pouring molten metal into the molds from one of the ~~seven (7)~~ **six (6)** mold making machines, identified as Hunter #1, **Hunter #3** - Hunter #6 and Sinto #1, with particulate matter emissions controlled by a baghouse, identified as DC-2. (DC-2 is also used to control PM emissions for the sand handling system in Section D.3. Compliance monitoring requirements for DC-2 are detailed in Section D.3)
- (C) Condition D.1.1 was changed to reflect changes made to rule 326 IAC 6-3 on June 2002. The condition was also changed as follows to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1 with the new allowable PM emissions and process weight of the new line:
- D.1.4 ~~2~~ **Particulate Matter (PM)** [326 IAC 6-3-2~~(c)~~]
- (a) Pursuant to 326 IAC 6-3 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Process**), the allowable ~~PM~~ **Particulate** emissions from charge handling shall not exceed 21.67 pounds per hour, when operating at a total process weight rate of 12 tons per hour.
  - (b) Pursuant to 326 IAC 6-3 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Process**), the allowable ~~PM~~ **Particulate** emissions from the cupola shall not exceed 21.67 pounds per hour, when each is operating at a total process weight rate of 12 tons per hour.
- Any change or modification for the cupola that would lead to increase in process weight rate of greater than 12 tons per hour must be approved by the OAQ before such change can occur.
- (c) Pursuant to 326 IAC 6-3 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Process**), the allowable ~~PM~~ **Particulate** emissions from each electric induction furnace shall not exceed 5.96 pounds per hour, when each is operating at a total process weight rate of 1.75 tons per hour.
  - (d) Pursuant to 326 IAC 6-3 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Process**), the allowable ~~PM~~ **Particulate** emissions from pouring/cooling processed in the Hunter #1, **Hunter #3** - # 6 and Sinto #1 Lines shall not exceed ~~32.5, 32.5~~ **5.87**, 43.6, 32.5, 32.5 and 45.3 pounds per hour, respectively, when operating at total process weight rates of ~~24.9, 24.9~~ **1.71**, 21.9, 45.2, 21.9, 21.9 and 54.0 tons per hour, respectively.
- (D) Condition D.1.3 was changed as follows to reflect the removal of old mold lines Hunter #1 and #2 and the addition of the new mold line Hunter #1 and add a new PM and PM10 testing requirement for the new line:

#### **Compliance Determination Requirements**

D.1.~~3~~ **4** Testing Requirements [326 IAC 2-7-6(1), (6)]

- (a) During the period between 24 and 30 months after issuance of this permit, the Permittee shall perform PM testing for the metal pouring/cooling operation for one (1) of the Hunter #1 #3 - #6 lines plus testing for the Sinto #1 line utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, or other methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (b) Within sixty (60) days after achieving maximum production rate, but no later than one-hundred and eighty (180) days after initial start-up of the new mold line Hunter #1, the Permittee shall perform PM (filterable) and PM<sub>10</sub> (filterable and condensable) stack tests utilizing methods approved by the Commissioner. These test shall be performed in accordance with Section C – Performance Testing, in order to determine compliance with the correspondent limits specified in condition D.1.1(b).

3. A new reporting requirement was added to the permit as follows:

**D.1.10 Reporting Requirements**

A quarterly summary of the amount of iron poured at the new Hunter #1 specified in condition D.1.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

4. Quarterly report of the amount of iron poured at the new Hunter #1 specified in condition D.1.1(a) was added to the permit

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Bremen Casting, Inc.  
 Source Address: 500 North Baltimore Street, Bremen, Indiana 46506  
 Mailing Address: P. O. Box 129, Bremen, Indiana 46506  
 Part 70 Permit No.: T099-6206-00001  
 Facility: Mold line Hunter #1  
 Parameter: Iron poured on Hunter #1  
 Limit: 14,994 tons per twelve (12) consecutive month period rolled on a monthly basis  
 YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			



Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 099-15758-00001 and Part 70 Significant Permit Modification No. 099-16245-00001.

**Appendix A**  
**Bremen Castings Inc.**  
**500 North Baltimore St., Bremen, IN**  
**099-15758-00001**  
**Ghassan Shalabi**

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**PTE**

Pollutant	Emission Factor (lb/t)	Throughput (tpy)	Emission (tpy)
PM	3.10	78,840	122.20
PM10	2.00	78,840	78.84
SO2	0.02	78,840	0.79
NOx	0.01	78,840	0.39
VOC	0.14	78,840	5.52
CO	0.00	78,840	0.00
Pb	0.02	78,840	0.63
HAPs	0.42	78,840	16.40
Cr	0.00160	78,840	0.0631
Mn	0.04200	78,840	1.6556
Co	0.00013	78,840	0.0051
Ni	0.00281	78,840	0.1108
As	0.00055	78,840	0.0217
Cd	0.00025	78,840	0.0099
Pb	0.01617	78,840	0.6374
Se	0.00004	78,840	0.0016
			2.5051

1. PM and PM10 emission factors are proposed by the source
2. SOx, NOx, VOC, and CO are AP-42, AIRS emission factors.
3. Lead and metal HAPs emission factors are taken from SPECIATE
4. Throughput is tpy metal poured
5. Organic HAPs emission factors are taken from an America Foundry Society document, compiled by the AFS Air Quality Committee and MACT Task Force for US EPA

**Appendix A**  
**Bremen Castings Inc.**  
**500 North Baltimore St., Bremen, IN**  
**099-15758-00001**  
**Ghassan Shalabi**

Page 2 of 2

**Limited PTE**

Pollutant	Emission Factor (lb/t)	Throughput (tpy)	Emission (tpy)
PM	3.10	14,994	23.24
PM10	2.00	14,994	14.99
SO2	0.02	14,994	0.15
NOx	0.01	14,994	0.07
VOC	0.14	14,994	1.05
CO	0.00	14,994	0.00
Pb	0.02	14,994	0.12
HAPs	0.42	14,994	3.12
Cr	0.00160	14,994	0.0120
Mn	0.04200	14,994	0.3149
Co	0.00013	14,994	0.0010
Ni	0.00281	14,994	0.0211
As	0.00055	14,994	0.0041
Cd	0.00025	14,994	0.0019
Pb	0.01617	14,994	0.1212
Se	0.00004	14,994	0.0003

1. PM and PM10 emission factors are proposed by the source
2. SOx, NOx, VOC, and CO are AP-42, AIRS emission factors.
3. Lead and metal HAPs emission factors are taken from SPECIATE
4. Throughput is tpy metal poured
5. Organic HAPs emission factors are taken from an America Foundry Society document, compiled by the AFS Air Quality Committee and MACT Task Force for US EPA